SIGGRAPH 2001

FUNDAMENTALS SEMINAR

SIGGRAPH
2001 EXPLORE INTERACTION
AND DIGITAL IMAGES

FUNDAMENTALS SEMINAR

Michael J. Bailey
San Diego Supercomputing Center &
University of California at San Diego

Wayne E. Carlson
Advanced Computing Center for Arts &
Design (ACCAD) at the Ohio State
University

Jackie White
College of Arts and Letters
California State University, Los Angeles

Barb Helfer
Advanced Computing Center for Arts &
Design (ACCAD) at the Ohio State
University

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Goals for the day:

- An accessible introduction to computer graphics *jargon,* concepts, techniques, technologies and applications.

- SIGGRAPH - the organization, conference, and volunteering

- Pathfinders - assistance in navigating the conference

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- Computer Graphics Applications (Jackie White)

- Graphics Systems Software (Wayne Carlson)

- Graphics Systems Hardware (Mike Bailey)

- SIGGRAPH (Jackie White)

- Pathfinders (Barb Helfer)

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Special Thanks to:

- SIGGRAPH 2001
  - Lynn Pocock, Conference Chair
  - Lou Harrison, Courses Chair
- SIGGRAPH Contributors & Collections
  - Slide Collections
  - Media trailer, video clips
- Other Slide & Video Contributors

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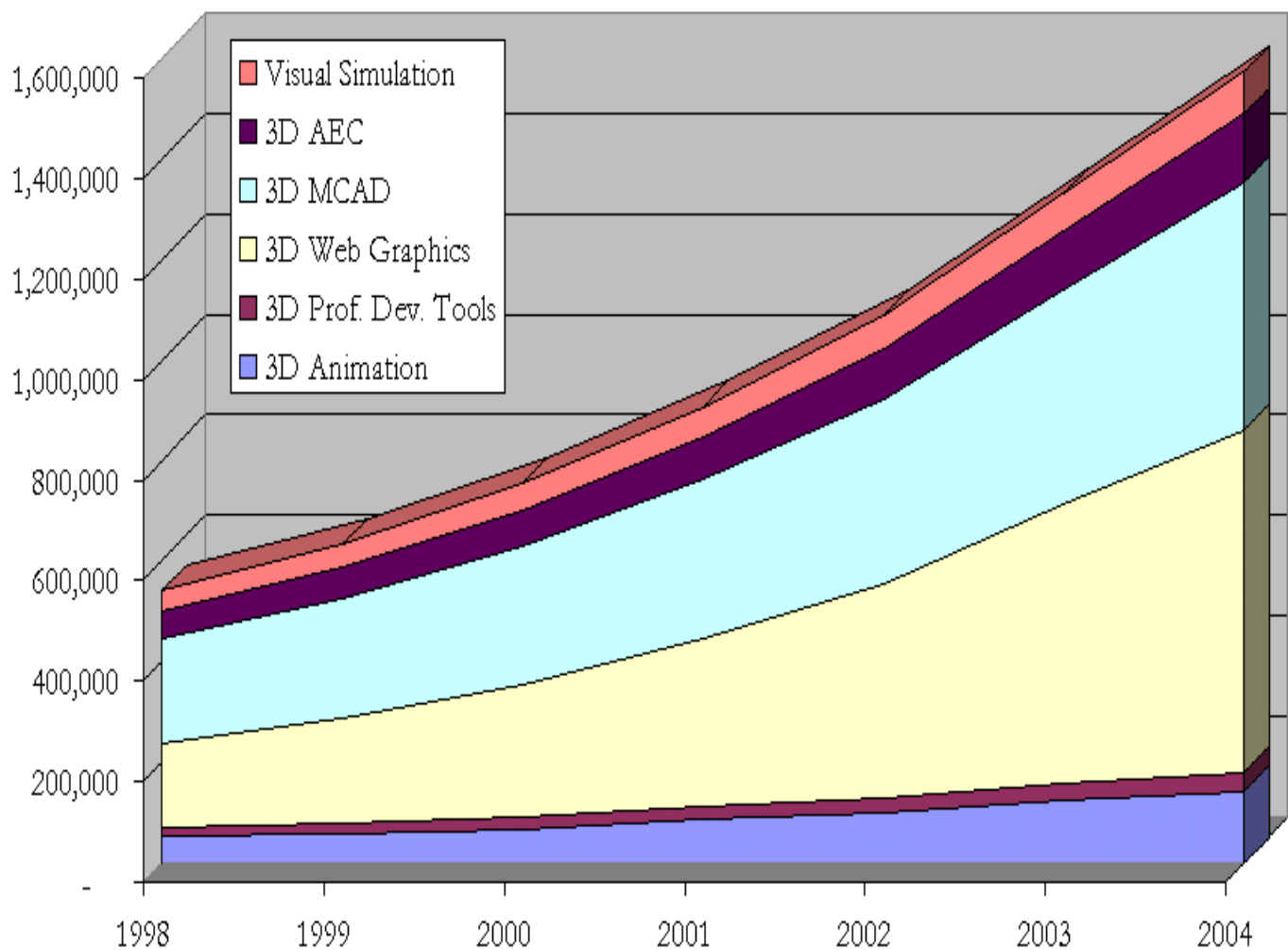College of Arts and Letters
California State University, Los Angeles

Barb Helfer
Advanced Computing Center for Arts & Design (ACCAD) at the Ohio State University

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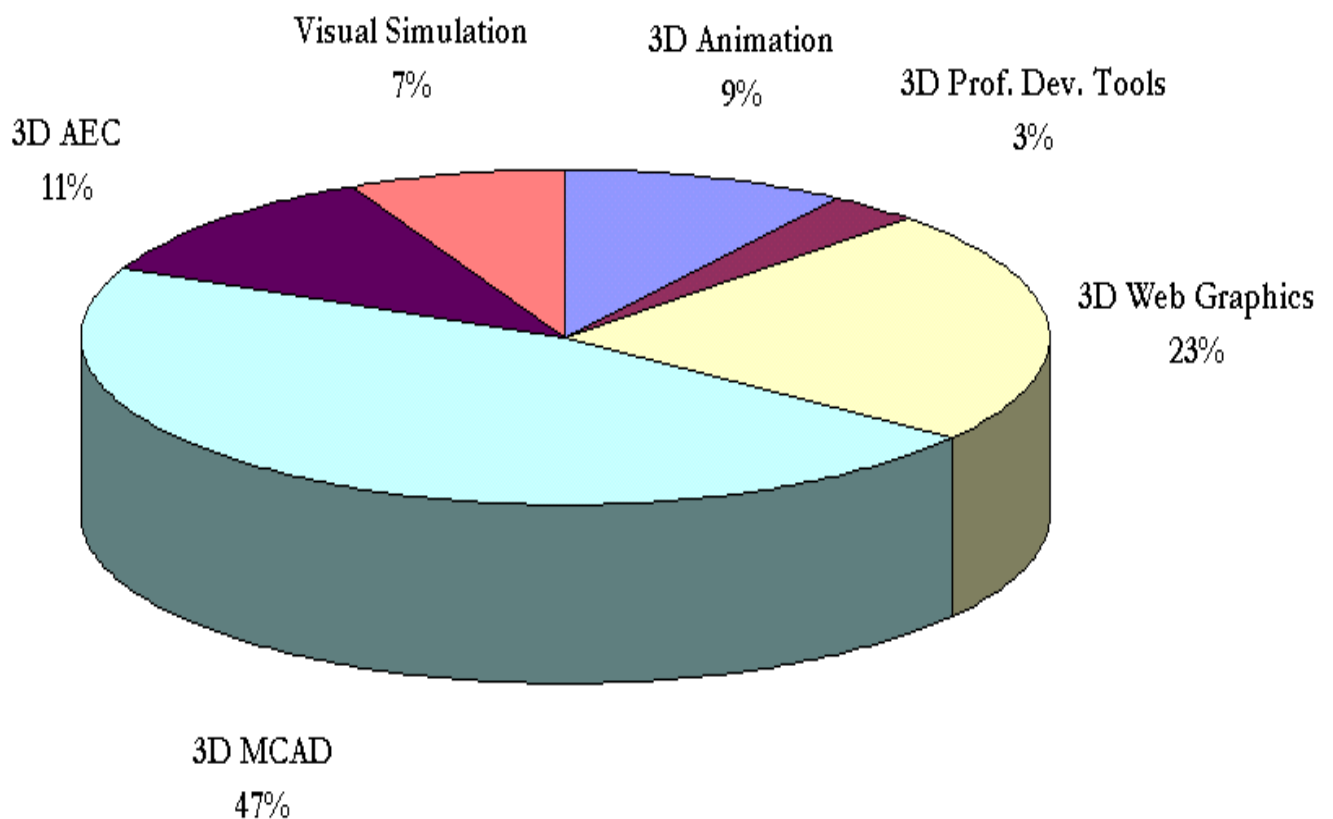
Current 3D Software Trends

Annual Unit Shipments for 3D Software

Source: M2 Research

3D Software Application Breakdown
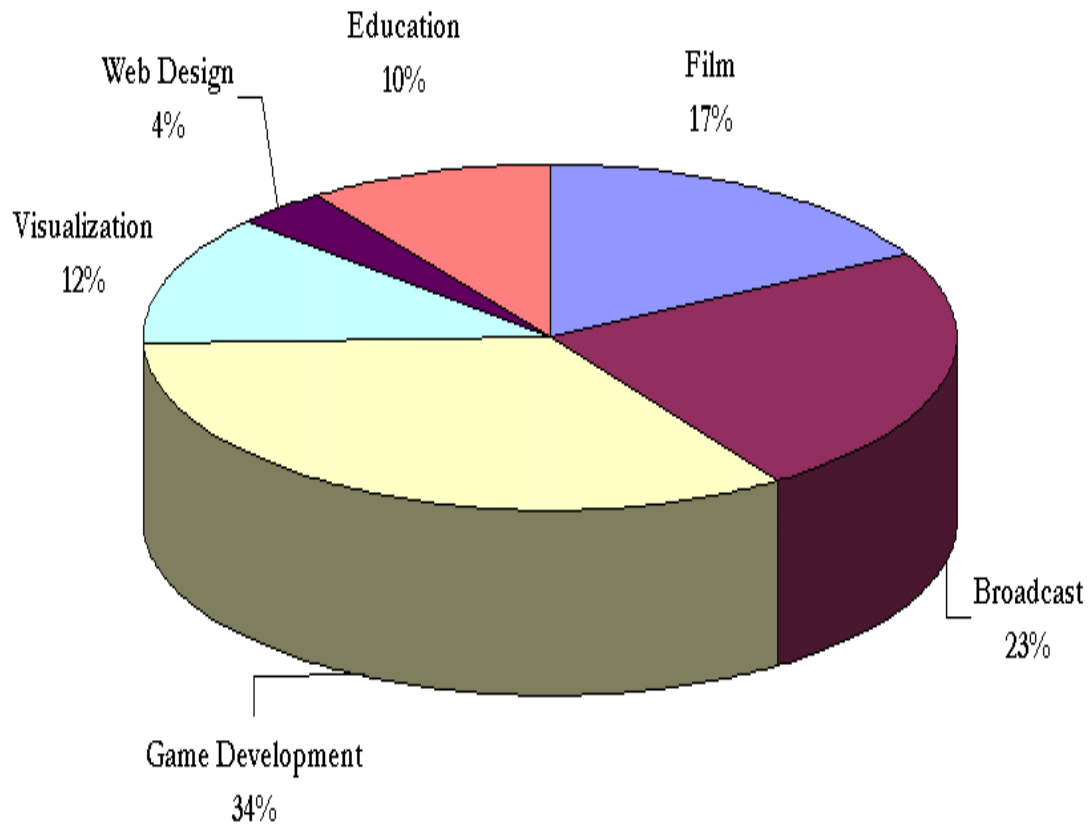

Breakdown of 3D Software by Application - 2000

Visual Simulation 7%

3D Animation 9%

3D Prof. Dev. Tools 3%

3D AEC 11%

3D Web Graphics 23%

3D MCAD 47%

Source: M2 Research

Animation Segment

Total Revenue: $155m

3D Animation Tools
- Market Segmentation -

Web Design
4%

Education
10%

Film
17%

Visualization
12%

Game Development
34%

Broadcast
23%

Source: M2 Research

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Animation

A collection of autonomous rovers and space vehicles that may be part of the scientific exploration of Mars
©2000 Jet Propulsion Laboratory
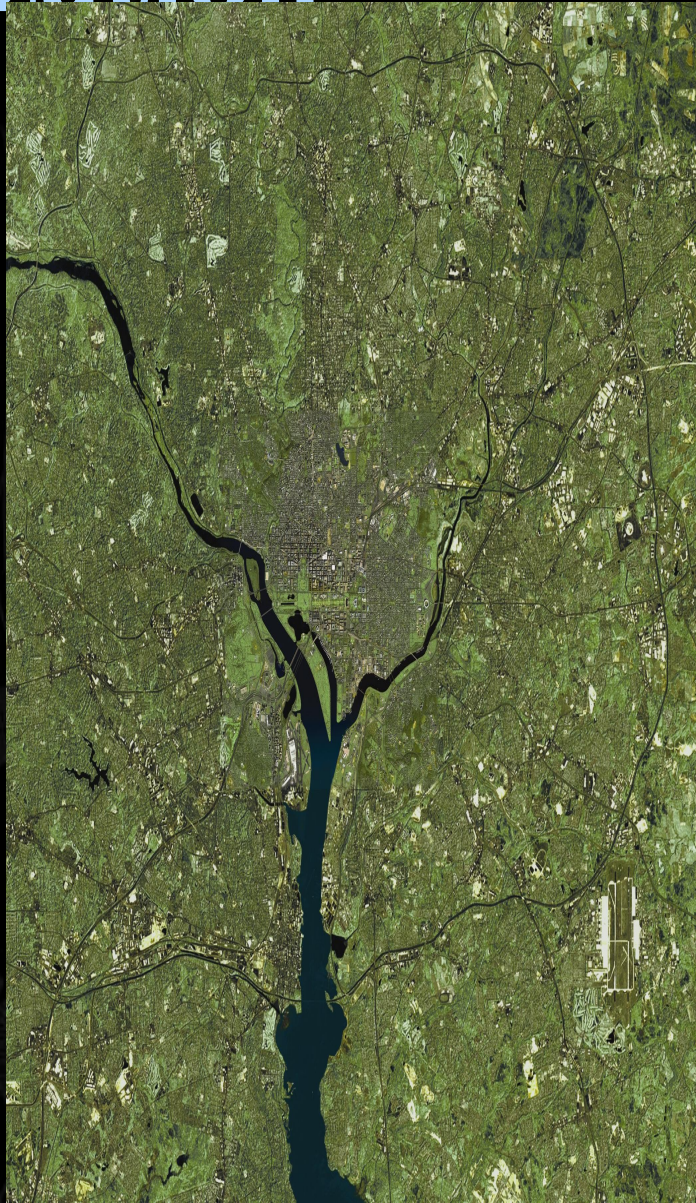**California Institute of Technology**

Animation

**Wild Jungle – Motion ride ©2000
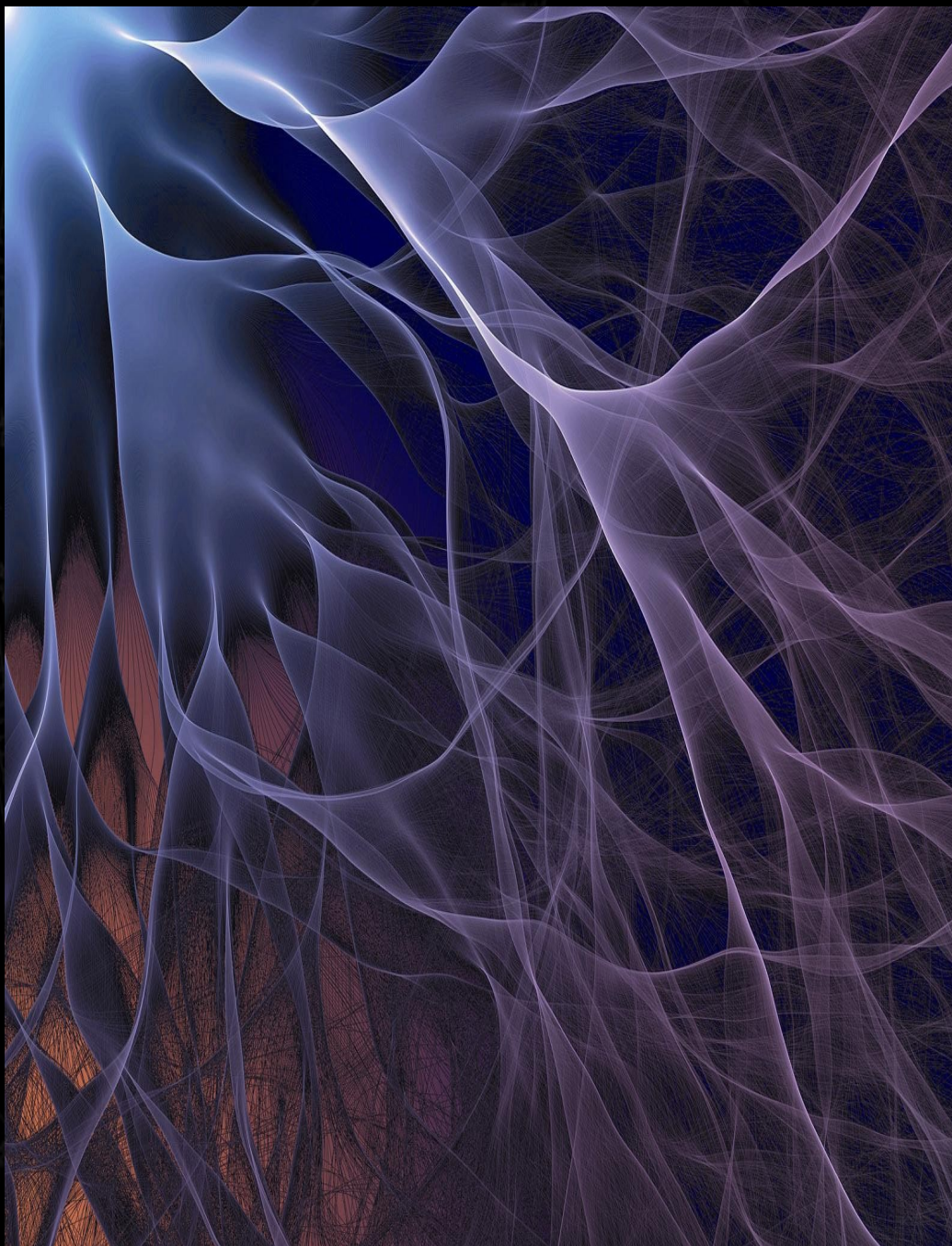Shinji Torigoe, Shingo Yasumaru
SEGA Corporation**

Animation – Scientific Visualization

**Capitol Zoom ©2000
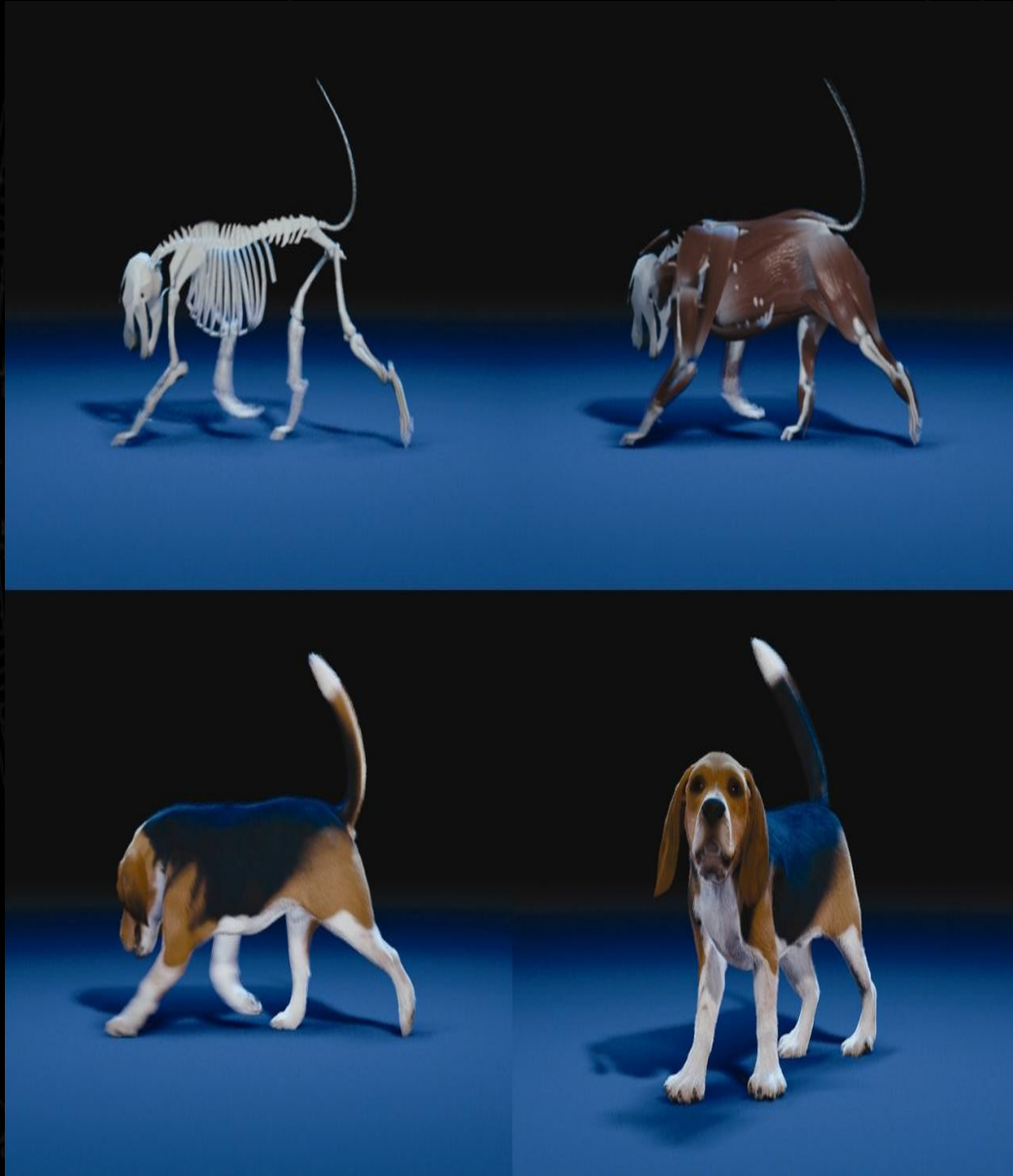Gregory W. Shirah, NASA/GSFC
Scientific Visualization Studio**

Art

Transport VI © 2000
Eric Heller
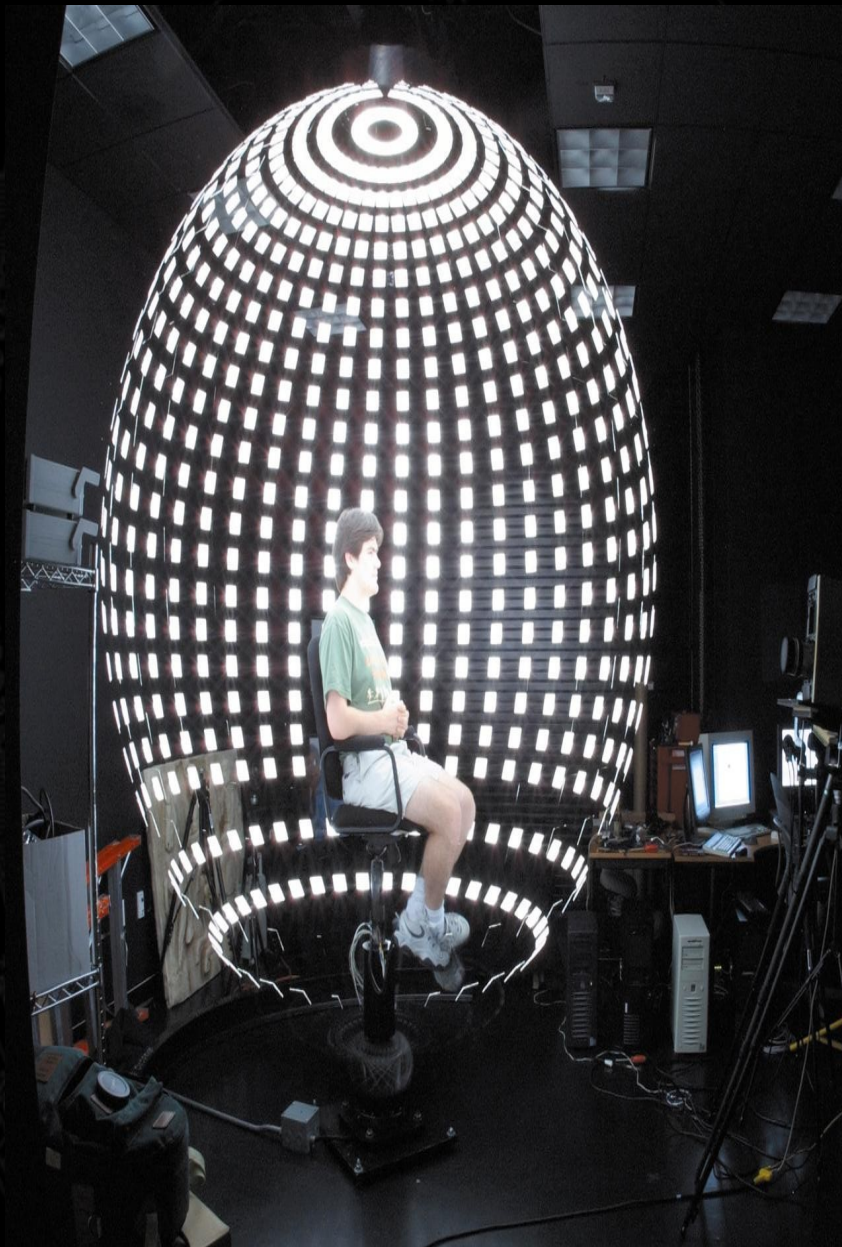
Modeling

Skinning Cats and Dogs Using Muscle Deformations ©2000 Rhythm & Hues Studios

Lighting

**Light Stage 2.0 ©2000
Institute for Creative Technologies**

Stereoscopy

Actual RGB image sent to the display.

System view of observer's position
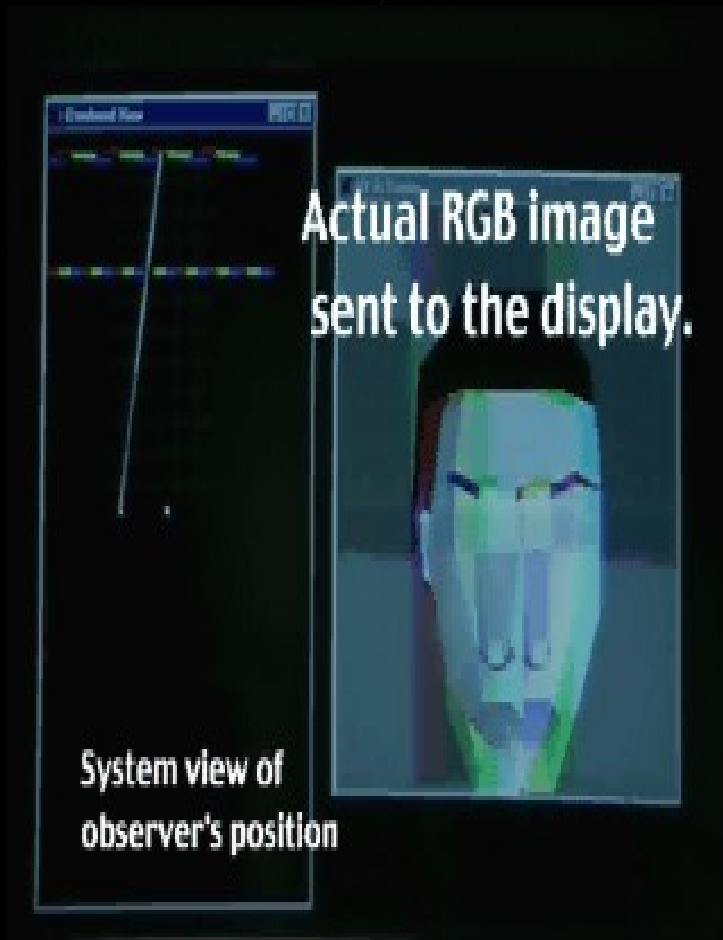
**Autostereoscopic image of a virtual face ©2000
Ken Perlin, Salvatore Paxia, Joel S. Kollin
Media Research Laboratory, Dept. of Computer Science
New York University**

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Interactive

**Informative Art ©2000
PLAY – Interactive Institute**

Education

Robert Negrete

Danny Chung

Los Angeles County High School for the Arts

ACM Organization

Assoc. for Computing Machinery Council & Executive Committees

SIG Governing Board

ACM HQ Staff

SIGACT

SIGGRAPH

SIGWEB

37 Special Interest Groups (SIGs)

ACM SIGGRAPH

Executive Committee (EC)

Conference Advisory Group (CAG)

SIGGRAPH 2001 Conference Committee

SIGGRAPH 2002 Conference Committee

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ACM SIGGRAPH

Executive Committee (EC)

Conference Advisory Group (CAG)

Executive Committee (EC)

President   Past President
Vice President
Education
Treasurer
Publications
Communications   At Large (2)
Chapters   CAG Chair
Ex Officio: CSE & ACM Program Dir

SIGGRAPH 2001 Conference Committee

SIGGRAPH 2002 Conference Committee

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2001 EXPLORE INTERACTION AND DIGITAL IMAGES

ACM SIGGRAPH

Executive Committee (EC)

Conference Advisory Group (CAG)

Conference Advisory Group
CAG Chair   EC Reps (2)
Chair S2000 Chair S2002
Chair S2001 Chair S2003
Ex Officio:
    Chief Staff Executive (CSE)

SIGGRAPH 2001 Conference Committee

SIGGRAPH 2002 Conference Committee

SIGGRAPH Conference Programs

Technical:

- Papers
- Panels
- Courses
- Sketches & Applications
- Educators Program
- CAL (hands-on)

Other Programs:

- Art Gallery: N-Space
- Computer Animation Festival
- Emerging Technologies
- The Studio (hands-on)

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SIGGRAPH Conference Programs

Services & Activities:

- Exhibition & Exhibitor Forums
- Keynote Address
- BOFs
- Receptions
- Special Sessions

- Pathfinders (Mentoring)
- Career Center
- Job Fair
- International Resources
- Internet Access Rooms

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